

Product datasheet for MR202097

Ranbp1 (NM_011239) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ranbp1 (NM_011239) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ranbp1
Synonyms: Htf9a
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR202097 representing NM_011239
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGGCCGCCAAGGACAGTCACGAGGACCATGATACTTCCACAGAGAATGCAGATGAGTCCAACCACG
 ACCCCCAGTTCGAGCCAATAGTTTCTCTCCCGAGCAAGAAATAAAACGCTGGAGGAAGATGAAGAGGA
 ACTTTTTAAGATGCGTGCAAAGCTGTTCCGGTTTGCTTCAGAGAATGACCTCCAGAATGGAAGGAGCGA
 GGCCTGGAGATGCAAGCTTCTGAAGCACAAGGAGAAAGGACCATCCGCCTTCTATGAGGAGGGACA
 AAACCTTGAAGATATGCGCCAACCACTATATTACACCAATGATGGAGCTGAAGCCGAATGCTGGCAGTGA
 CCGAGCCTGGGTCTGGAATACCCACGCCGACTTTGCTGACGAGTGCCCAAGCCTGAGCTGCTCGCCATC
 CGTTCCTAAATGCTGAGAATGCACAAAAGTTCAAACAAAGTTTGAAGAATGCAGGAAAGAAATGAAG
 AGAGAGAAAAGAAAGGACCAGGCAAAAATGATAATGCCGAAAAGGTGGCCGAGAAGCTGGAAGCCCTTTC
 AGTGAGGGAGGCCAGAGAGGAGGCTGAAGAGAAGTCTGAGGAGAAACAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR202097 representing NM_011239
 Red=Cloning site Green=Tags(s)

MAAAKDSHEDHDTSTENADESNHDPQFEPIVSLPEQEIKTLEEEDEELFKMRAKLFRAFSENDLPEWKER
 GTGDVKLLKHKEKGTIRLLMRRDKTLKICANHYITPMELKPNAGSDRAWVWNTHADFADECPPELLAI
 RFLNAENAQKFKTKFEERKEIEEREKKGPGKNDNAEKVAEKLEALSVREAREEAEEKSEEKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

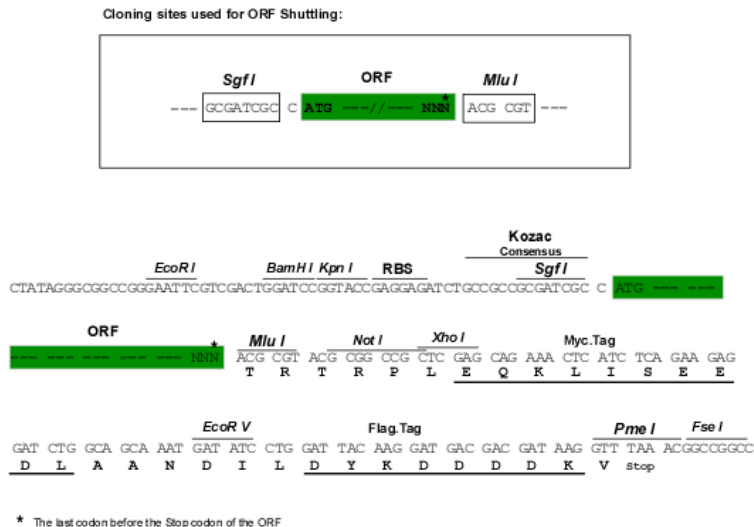


[View online »](#)

Chromatograms: https://cdn.origene.com/chromatograms/mm9036_b10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011239

ORF Size: 609 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_011239.2](#), [NP_035369.2](#)

RefSeq Size: 852 bp

RefSeq ORF: 612 bp

Locus ID: 19385

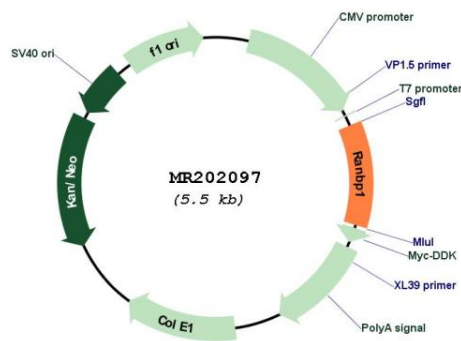
UniProt ID: [P34022](#)

Cytogenetics: 16 11.3 cM

MW: 24 kDa

Gene Summary: Plays a role in RAN-dependent nucleocytoplasmic transport. Alleviates the TNPO1-dependent inhibition of RAN GTPase activity and mediates the dissociation of RAN from proteins involved in transport into the nucleus (PubMed:9428644). Induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins (By similarity). Promotes the disassembly of the complex formed by RAN and importin beta. Promotes dissociation of RAN from a complex with KPNA2 and CSE1L (PubMed:9428644). Required for normal mitotic spindle assembly and normal progress through mitosis via its effect on RAN (By similarity). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed:9428644). Inhibits RCC1-dependent exchange of RAN-bound GDP by GTP (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202097